Operation, Parts

FinishPro II 595 PC Pro Airless/Air-Assisted Sprayer

334598A

EN

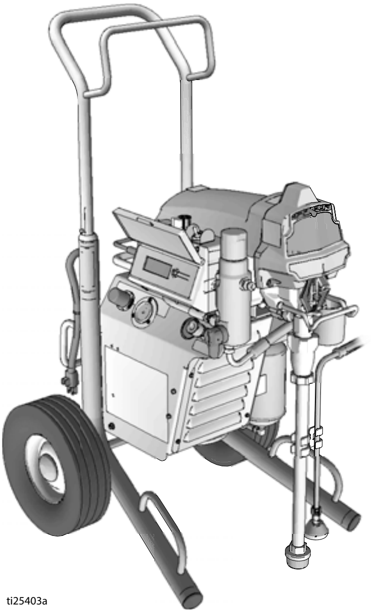
For professional use only.
Not approved for use in explosive atmospheres or hazardous locations.
For portable application of architectural paints and coatings.

Models: 17C424, 17C357, 17C423, 17C358
3300 psi (228 bar, 22.8 MPa) Maximum Working Pressure
See page 3 for additional model information.

Important Safety Instructions

Read all warnings and instructions in this manual and related manuals.
Be familiar with the controls and the proper usage of the equipment.
Save these instructions.

Related Manuals
Gun - 333182 **Pump - 334599**



Use only genuine Graco replacement parts.
The use of non-Graco replacement parts may void warranty.

PROVEN QUALITY. LEADING TECHNOLOGY.

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Models

	VAC	Model	
C ETL US LISTED Intertek 110474 Certified to CAN/CSA C22.2 No. 68 Conforms to UL 1450	120 USA	FinishPro II 595PC Pro	17C424
CE	230 CEE 7/7	FinishPro II 595PC Pro	17C423
	230 Europe Multicord	FinishPro II 595PC Pro	17C358
✓	230 Asia/ANZ	FinishPro II 595PC Pro	17C357
	230 China		

Warnings

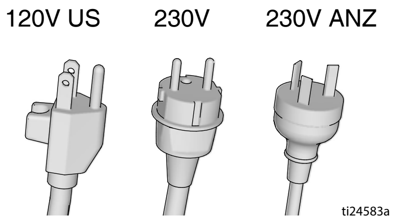
The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

⚠WARNING

GROUNDING

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

- Improper installation of the grounding plug is able to result in a risk of electric shock.
- When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal.
- The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.
- Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded.
- Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.
- This product is for use
- on a nominal 120V or 230V circuit and has a grounding plug similar to the plugs illustrated below.



- Only connect the product to an outlet having the same configuration as the plug.
- Do not use an adapter with this product.

Extension Cords:

- Use only a 3-wire extension cord that has a grounding plug and a grounding receptacle that accepts the plug on the product.
- Make sure your extension cord is not damaged. If an extension cord is necessary use 12 AWG (2.5mm^2) minimum to carry the current that the product draws.
- An undersized cord results in a drop in line voltage and loss of power and overheating.

⚠WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:

- Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
- Paint or solvent flowing through the equipment is able to result in static electricity. Static electricity creates a risk of fire or explosion in the presence of paint or solvent fumes. All parts of the spray system, including the pump, hose assembly, spray gun, and objects in and around the spray area shall be properly grounded to protect against static discharge and sparks. Use Graco conductive or grounded high-pressure airless paint sprayer hoses.
- Verify that all containers and collection systems are grounded to prevent static discharge. Do not use pail liners unless they are antistatic or conductive.
- Connect to a grounded outlet and use grounded extensions cords. Do not use a 3-to-2 adapter.
- Do not use a paint or a solvent containing halogenated hydrocarbons.
- Do not spray flammable or combustible liquids in a confined area.
- Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area.
- Sprayer generates sparks. Keep pump assembly in a well ventilated area at least 20 feet (6.1 m) from the spray area when spraying, flushing, cleaning, or servicing. Do not spray pump assembly.
- Do not smoke in the spray area or spray where sparks or flame is present.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
- Know the contents of the paints and solvents being sprayed. Read all Safety Data Sheets (SDS) and container labels provided with the paints and solvents. Follow the paint and solvents manufacturer's safety instructions.
- Fire extinguisher equipment shall be present and working.

Warnings

⚠WARNING

SKIN INJECTION HAZARD

High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, **get immediate surgical treatment.**

- Do not aim the gun at, or spray any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- Always use the nozzle tip guard. Do not spray without nozzle tip guard in place.
- Use Graco nozzle tips.
- Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, follow the **Pressure Relief Procedure** for turning off the unit and relieving the pressure before removing the nozzle tip to clean.
- Equipment maintains pressure after power is shut off. Do not leave the equipment energized or under pressure while unattended. Follow the **Pressure Relief Procedure** when the equipment is unattended or not in use, and before servicing, cleaning, or removing parts.
- Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- This system is capable of producing 3300 psi. Use Graco replacement parts or accessories that are rated a minimum of 3300 psi.
- Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
- Verify that all connections are secure before operating the unit.
- Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.

EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Always wear appropriate gloves, eye protection, and a respirator or mask when painting.
- Do not operate or spray near children. Keep children away from equipment at all times.
- Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
- Stay alert and watch what you are doing.
- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not kink or over-bend the hose.
- Do not expose the hose to temperatures or to pressures in excess of those specified by Graco.
- Do not use the hose as a strength member to pull or lift the equipment.
- Do not spray with a hose shorter than 25 feet.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.

⚠WARNING

ELECTRIC SHOCK HAZARD

This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off and disconnect power cord before servicing equipment.
- Connect only to grounded electrical outlets.
- Use only 3-wire extension cords.
- Ensure ground prongs are intact on power and extension cords.
- Do not expose to rain. Store indoors.

PRESSURIZED ALUMINUM PARTS HAZARD

Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.
- Do not use chlorine bleach.
- Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.

MOVING PARTS HAZARD

Moving parts can pinch, cut, or amputate fingers and other body parts.

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** and disconnect all power sources.

TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- Read MSDSs to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

PERSONAL PROTECTIVE EQUIPMENT

Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This protective equipment includes but is not limited to:

- Protective eyewear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

BURN HAZARD

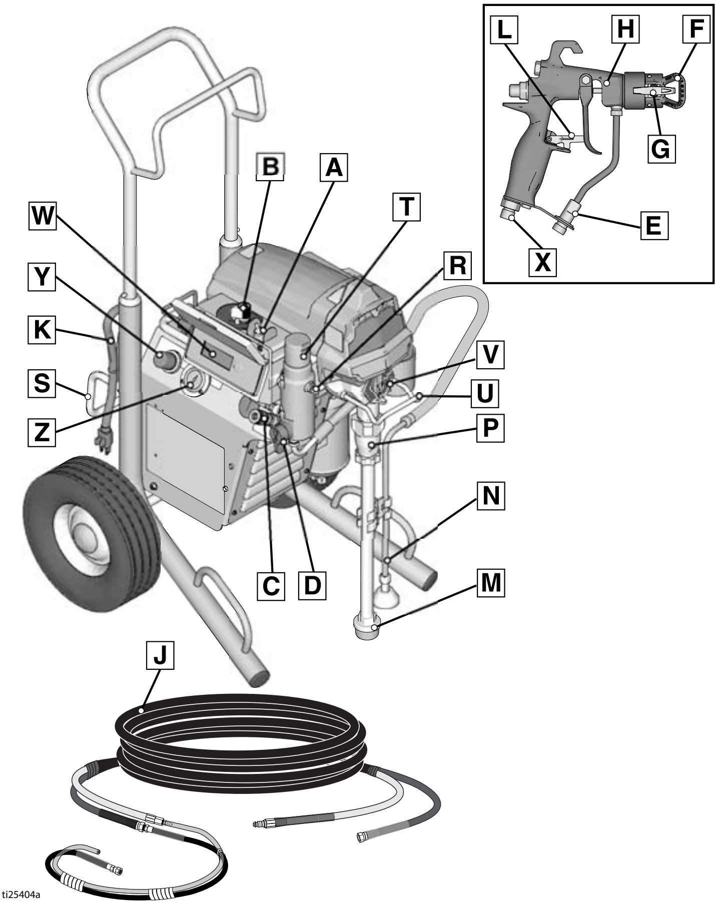
Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:

- Do not touch hot fluid or equipment.

CALIFORNIA PROPOSITION 65

This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

Component Identification



A	Power/Function Selector
B	Pressure Control
C	Air Hose Connection
D	Prime Valve
E	Gun Filter
F	Tip Guard
G	Spray Tip
H	Gun
J	Airless Hose
K	Power Cord
L	Trigger Lock
M	Fluid Intake
N	Drain Tube

P	Pump
R	Fluid Outlet
S	Hanger
T	Filter
U	Pail Hook
V	Finger Guard / TSL Fill Point
W	Display
X	Gun Air Regulator
Y	Sprayer Air Pressure Regulator
Z	Air Pressure Gauge
	Model/Serial Tag (Not shown, located on bottom of unit.)

Grounding

The equipment must be grounded to reduce the risk of static sparking and electric shock. An electric or static spark can cause fumes to ignite or explode. An improper ground can cause electric shock. A good ground provides an escape wire for the electric current.

This sprayer includes a ground wire with an appropriate ground contact.

The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.

Power Requirements

- 100-120V units require 100-120 VAC, 50/60 Hz, 15A, 1 phase.
- 230V units require 230 VAC, 50/60 HZ, 10A, 1 phase.

Extension Cords

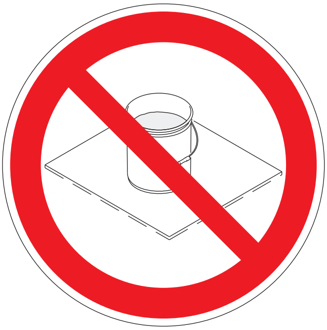
Use an extension cord with an undamaged ground contact. If an extension cord is necessary, use a 3-wire, 12 AWG (2.5 mm^2) minimum.

NOTE: Smaller gauge or longer extension cords may reduce sprayer performance.

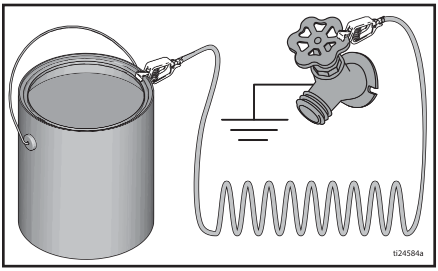
Pails

Solvent and oil-based fluids: follow local code. Use only conductive metal pails, placed on a grounded surface such as concrete.

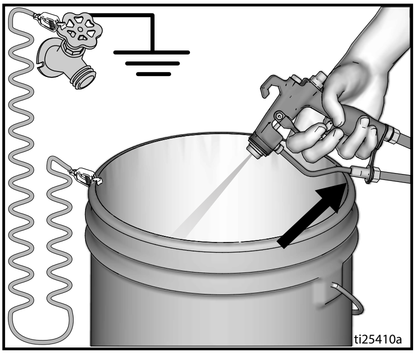
Do not place pail on a non-conductive surface such as paper or cardboard which interrupts grounding continuity.



Always ground a metal pail: connect a ground wire to the pail. Clamp one end to the pail and the other end to a true earth ground such as a water pipe.



To maintain ground continuity when sprayer is flushed or pressure is relieved: hold metal part of spray gun firmly to the side of a grounded metal pail then trigger the gun.

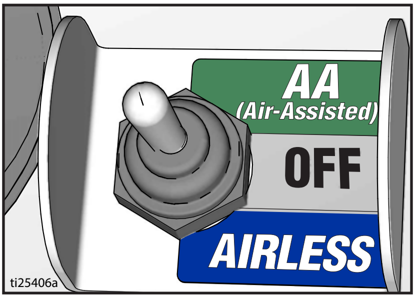


Pressure Relief Procedure

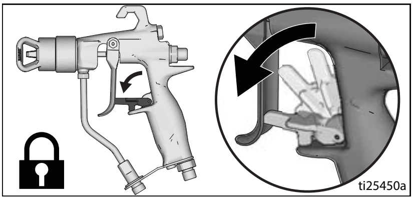
Follow the Pressure Relief Procedure whenever you see this symbol.

This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashed fluid and moving parts, follow the **Pressure Relief Procedure** whenever sprayer is stopped and before sprayer is cleaned or checked, and before equipment is serviced.

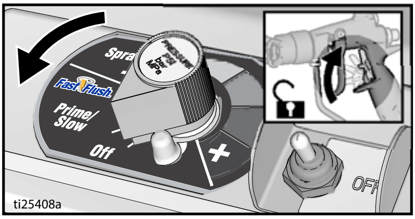
1. Set SELECTOR switch to **OFF** position. Wait 7 seconds for power to dissipate.


AA
(Air-Assisted)
OFF
AIRLESS
ti25406a

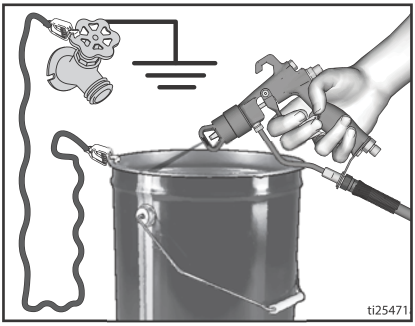
2. Engage trigger lock.



3. Turn pressure control to lowest setting. Disengage trigger lock.

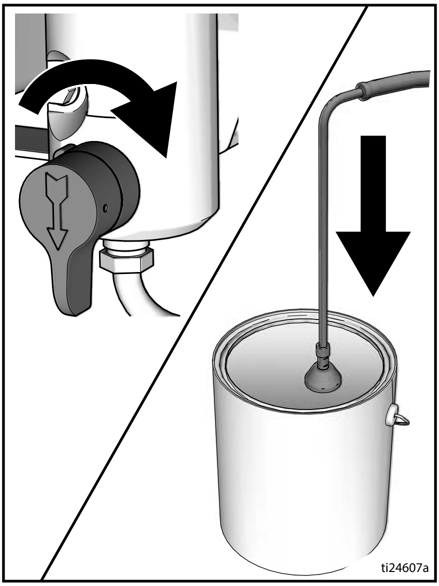

Spray
Pressure
psi
bar
MPa
Fast Flush
Prime/
Slow
Off
+
OFF
ti25408a

4. Hold a metal part of the gun firmly to a grounded metal pail. Trigger the gun to relieve pressure.



5. Engage trigger lock.

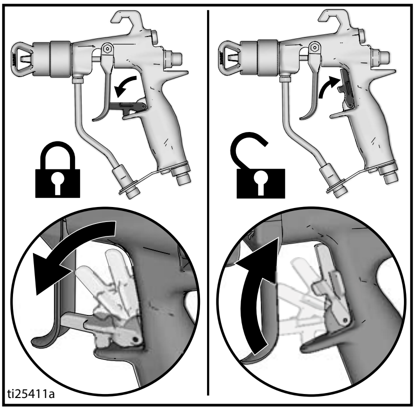
6. Put drain tube in pail. Turn prime valve down. Leave prime valve in down (drain) position until you are ready to spray again.



7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
   a. VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually.
   b. Loosen nut or coupling completely.
   c. Clear hose or tip obstruction.

Trigger Lock

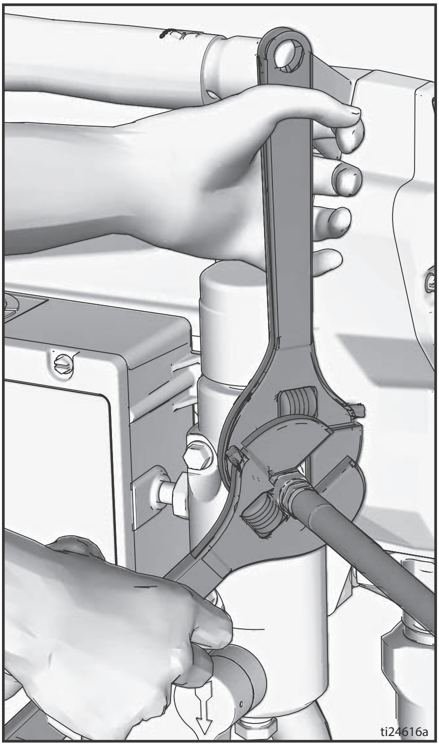
Always engage the trigger lock when sprayer is stopped to prevent the gun from being triggered accidentally by hand or if dropped or bumped.



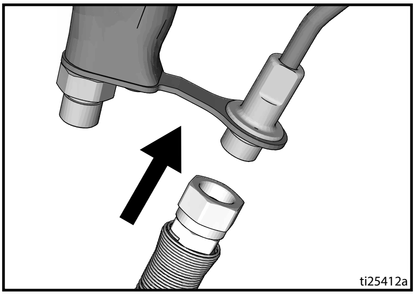
Setup

When unpacking sprayer for the first time or after long term storage perform setup procedure. When first setup is performed remove shipping plug from fluid outlet.

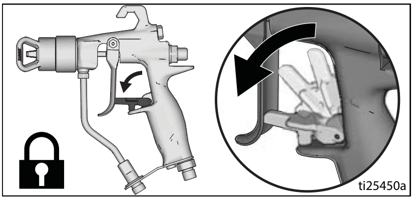
1. Connect Graco airless hose to fluid outlet. Use wrenches to tighten securely.



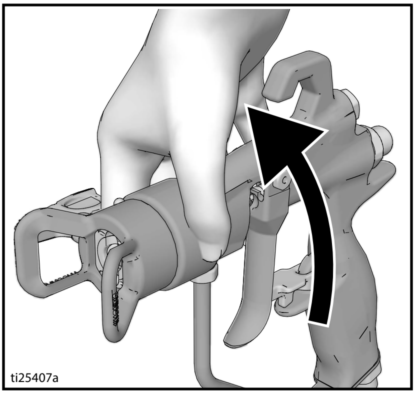
2. Connect other end of hose to gun.



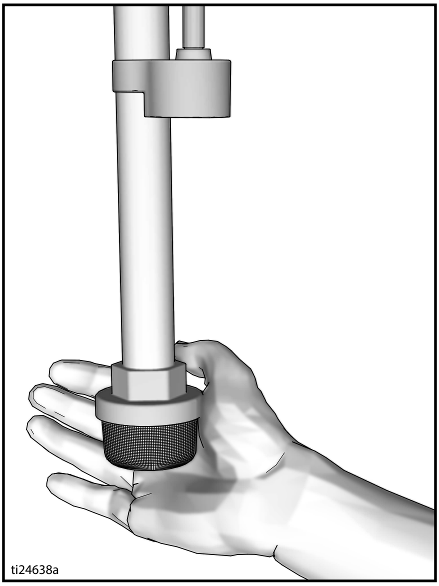
3. Use wrenches to tighten securely.
4. Engage trigger lock.



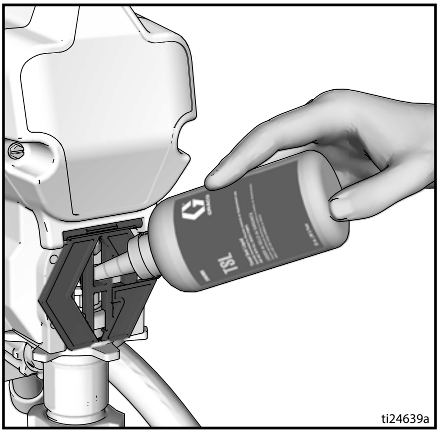
5. Remove tip guard/air cap.



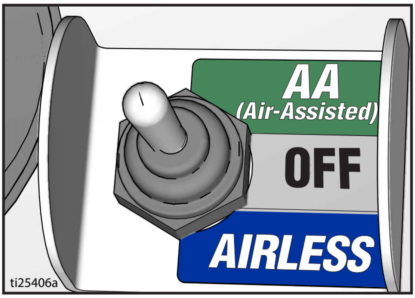
6. When unpacking sprayer for the first time remove packaging materials from inlet strainer. After long term storage check inlet strainer for clogs and debris.



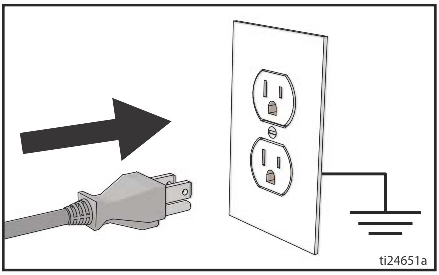
7. Fill throat packing nut with TSL to prevent premature packing wear. Do this daily or each time you spray.
    a. Place the TSL bottle nozzle into the top center opening in the grill at the front of the sprayer.
    b. Squeeze bottle to dispense enough TSL to fill the space between the pump rod and packing nut seal.


TSL
ti24639a

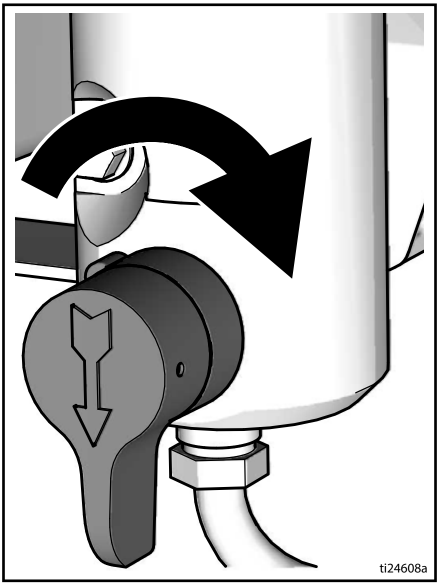
8. Make certain SELECTOR switch is **OFF**.


AA
(Air-Assisted)
OFF
AIRLESS
ti25406a

9. Plug power supply cord into a properly grounded electrical outlet.



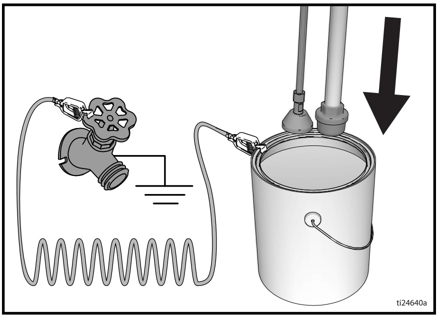
10. Turn prime valve down.



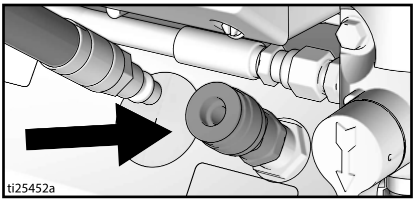
11. Place fluid intake with drain tube in grounded metal pail partially filled with flushing fluid. See **Grounding**, page 9.

NOTE: New sprayers are shipped with storage fluid that must be flushed out with mineral spirits prior to using the sprayer.

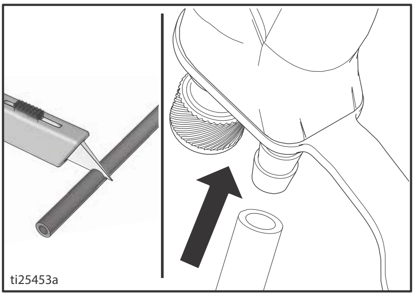
Check flushing fluid for compatibility with material that is to be sprayed. A secondary flush with a compatible fluid may be necessary. Use water for latex paint or mineral spirits for oil-based paint.



12. Turn pressure control to OFF.
13. Set SELECTOR switch to **ON** position.
14. Turn prime valve horizontal. Disengage trigger lock.
15. Turn pressure control to Prime/Slow.
16. Hold a metal part of the gun firmly to a grounded metal pail. Trigger gun and flush for one minute.
17. Set SELECTOR switch to **OFF** position.
18. Engage trigger lock.
19. After flushing storage fluid out of the sprayer empty pail. Replace fluid intake with drain tube in grounded metal pail partially filled with flushing fluid. Use water to flush water-based paint or mineral spirits to flush oil-based paint.
20. Set SELECTOR switch to **ON** position.
21. Turn prime valve horizontal. Disengage trigger lock.
22. Hold a metal part of the gun firmly to a grounded metal pail. Trigger gun and flush until clean.
23. Set SELECTOR switch to **OFF** position.
24. Engage trigger lock.
25. Sprayer is now ready to startup and spray in airless mode.
26. Attach air hose to sprayer air hose connection.



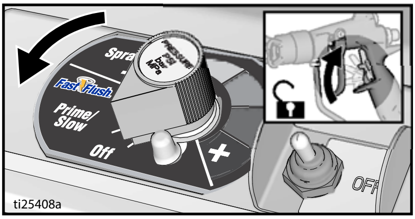
27. Cut air hose to length and couple to air connection on gun.



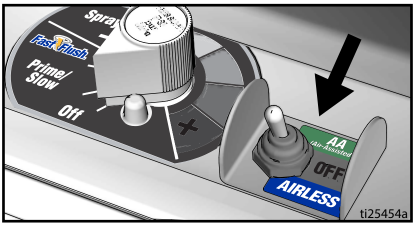
28. Sprayer is now ready to startup and spray in air-assisted (AA) mode.

Startup

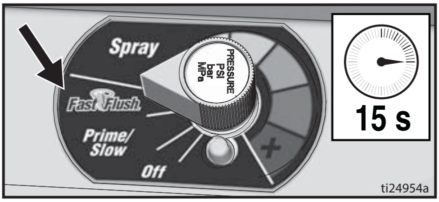
1. Perform **Pressure Relief Procedure**, page 10.
2. Turn pressure control to lowest pressure.


Spray
Fast Flush
Prime/ Slow
Off
PRESSURE PSI bar MPa
+
OFF
ti25408a

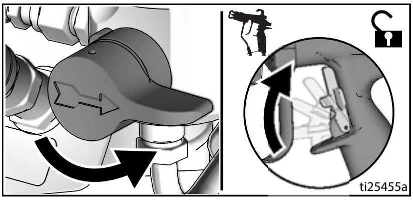
3. Set SELECTOR switch to **AIRLESS** position.


Spray
Fast Flush
Prime/ Slow
Off
+
AA (Air-Assisted)
OFF
AIRLESS
ti25454a

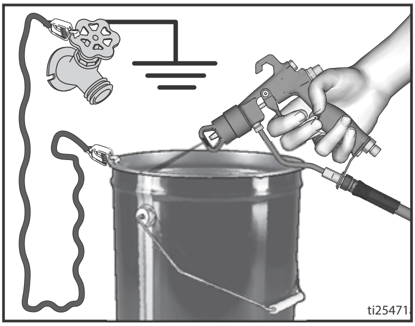
4. Place fluid intake in paint pail. Place drain tube in waste pail.
5. Turn pressure control to Fast Flush to start motor. Allow paint to circulate through drain tube for 15 seconds.


Spray
Fast Flush
Prime/ Slow
Off
PRESSURE PSI bar MPa
+
15 s
ti24954a

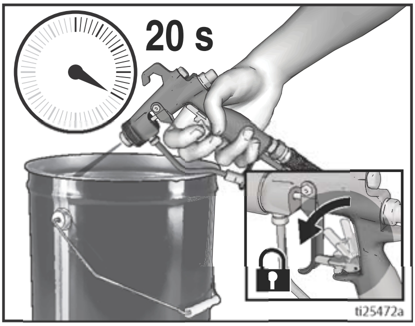
6. Turn prime valve horizontal. Disengage trigger lock.



7. Hold gun against grounded metal waste pail. Trigger gun until paint appears.



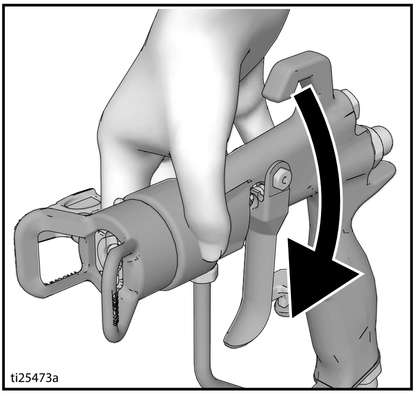
8. Move gun to paint pail and trigger for 20 seconds. Release trigger and allow sprayer to build pressure. Engage trigger lock.


20 s
ti25472a

⚠				
High-pressure spray is able to inject toxins into the body and cause serious bodily injury. Do not stop leaks with hand or rag.				

9. Inspect for leaks. If leaks occur, perform **Pressure Relief Procedure**, page 10, then tighten all fittings and repeat Startup procedure. If there are no leaks continue with the next step.

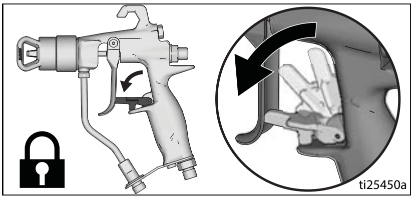
10. Screw tip assembly onto gun and tighten. See **Spray Tip Installation**, page 17. For gun assembly instructions, see separate gun manual.



Operation

Spray Tip Installation

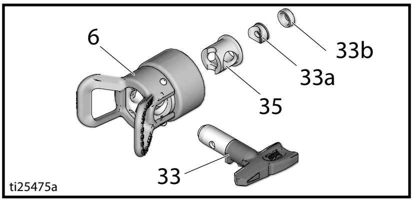
1. Perform **Pressure Relief Procedure**, page 10.
2. Engage trigger lock.



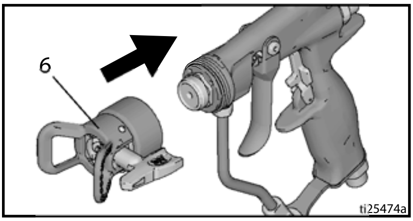
3. Insert seat (33a) into seat housing (35).
4. Insert seat housing (35) into air cap (6).
5. Insert seal (33b) over seat (33a). Use black seal for water-based materials and orange seal for solvent and oil-based materials.
6. Insert tip into slot (a) in air cap (6).

NOTICE

If air cap is not fully installed on gun, fluid pressure can force paint into air line and damage sprayer.



7. Install air cap (6) over end of gun. Hand tighten.



Tip Selection

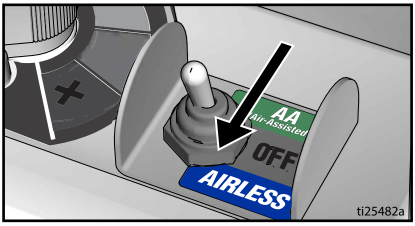
Material	Oil Based	Water Based	Tip Size	Fluid Setting	Air setting
Stains/Varnish	✓	✓	.008/.010	500-700 psi (34-48 bar)	10-15 psi (0.7-1.0 bar)
Lacquers	✓	✓	.008/.010	700-1000 psi (48-69 bar)	10-15 psi (0.7-1.0 bar)
DTM		✓	.010/.012	900-1200 psi (62-83 bar)	15-20 psi (1.0-1.4 bar)
DTM (Alkyd)	✓		0.14/0.16	1800-2400 psi (124-165 bar)	20-25 psi (1.4-1.7 bar)
Enamels	✓	✓	0.14/0.16	1800-2400 psi (124-165 bar)	25-30 psi (1.7-2.1 bar)

Spray

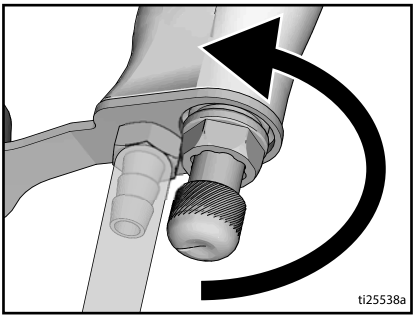
Air-Assisted Spraying

NOTE: In high humidity conditions, moisture can accumulate in the air line. If this occurs, install an in-line desiccant filter (24U981 or 24U982) to prevent moisture from entering the gun.

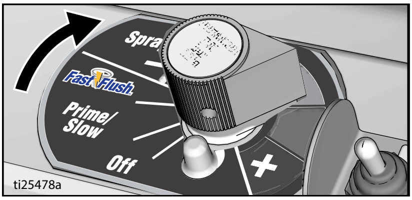
1. Set SELECTOR switch to **AIRLESS** position.


AA
Air-Assisted
OFF
AIRLESS
ti25482a

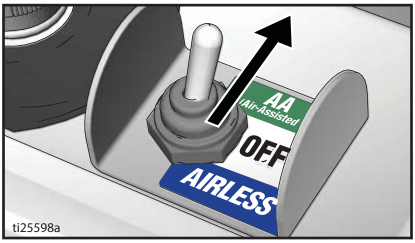
2. Open gun air regulator all the way.



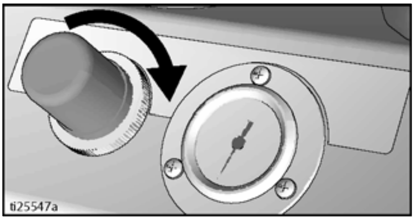
3. Prime pump, see **Startup**, page 15.
4. Set fluid pressure to highest setting.


Spray
FastFlush
Prime/
Slow
Off
ti25478a

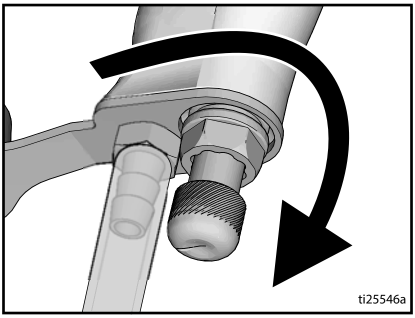
5. While spraying gun, decrease fluid pressure until tails appear in spray pattern.
6. Set SELECTOR switch to **AA** (Air-Assisted).


AA
(Air-Assisted)
OFF
AIRLESS
ti25598a

7. Trigger gun. While spraying, turn air regulator knob to increase pressure until tails disappear.

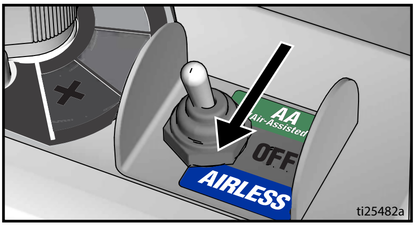


8. Use gun air regulator to fine tune spray pattern.

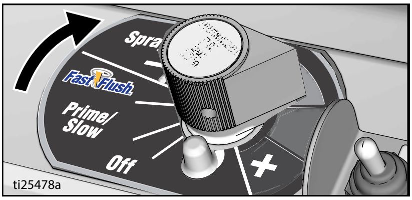


Airless Spraying

1. Set SELECTOR switch to **AIRLESS** position.


AA
Air-Assisted
OFF
AIRLESS
ti25482a

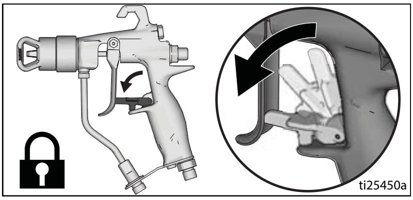
2. Prime pump, see **Startup**, page 15.
3. Start with pressure turned to the lowest setting. Spray test pattern. Gradually increase fluid pressure until you achieve a consistent spray pattern without heavy edges. Use a smaller tip size if pressure adjustment alone does not eliminate heavy edges.


Spra
FastFlush
Prime/
Slow
Off
ti25478a

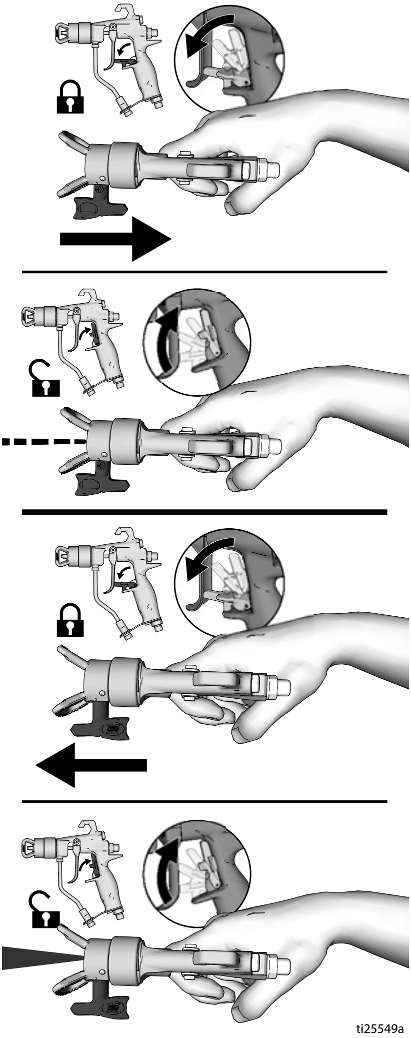
- Hold gun perpendicular and 10-12 inches from the surface. Overlap strokes by 50%.
- Move gun before triggering and release trigger before stopping.

Clear Tip Clog

1. Perform **Pressure Relief Procedure**, page 10.
2. Engage trigger lock.



3. Engage trigger lock. Return spray tip to original position. Disengage trigger lock and continue spraying.
    a. **Flat tip:** Remove and clean guard and tip
    b. **RAC Tip:** Proceed to next step.
4. Rotate tip 180°.
5. Disengage trigger lock.
6. Trigger gun at waste area to clear clog.
7. Engage trigger lock.
8. Rotate tip back 180° to spray position.

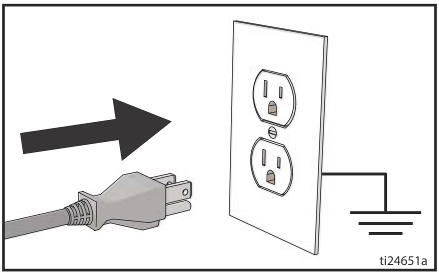


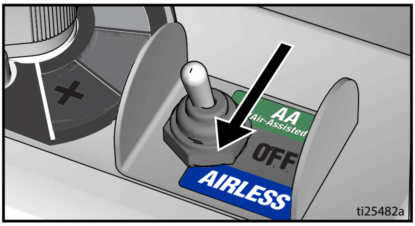
Digital Display

Most models are equipped with a digital display. This section explains how to use this feature.

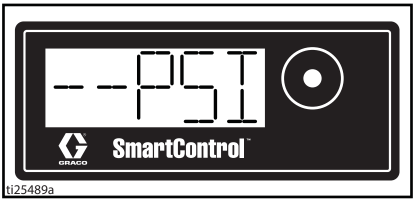
Pressure Display

1. Perform **Pressure Relief Procedure**, page 10.
2. Plug sprayer into grounded outlet. Set SELECTOR switch to **AIRLESS** position.

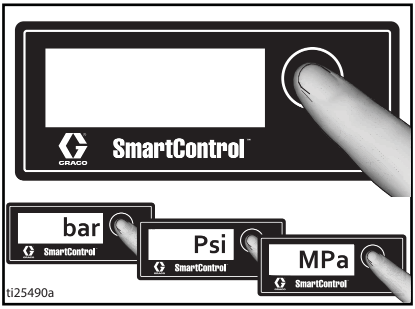



AA
Air-Assisted
OFF
AIRLESS
ti25482a

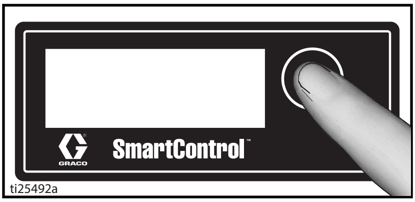
3. The pressure is displayed. Dashes indicate pressure is less than 200 psi (14 bar, 1.4 MPa).


--PSI
GRACO
SmartControl
ti25489a

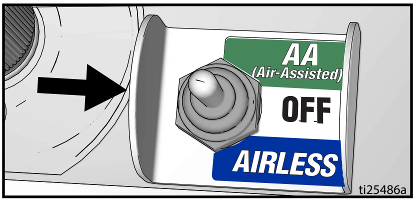
4. Press and hold display button to change pressure units (psi, bar, or MPa).


GRACO
SmartControl
bar
Psi
MPa
ti25490a

Stored Data Display

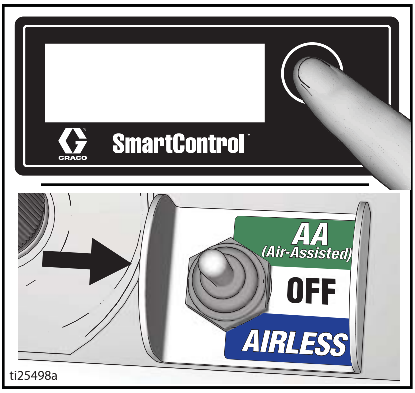

GRACO
SmartControl
ti25492a

1. Set SELECTOR switch to **OFF** position.

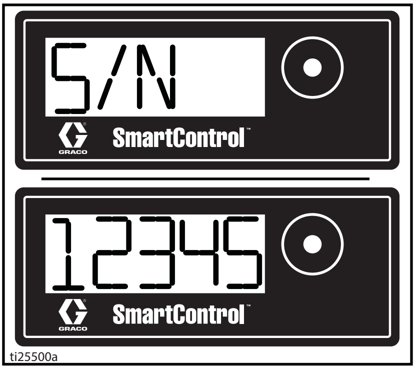

AA
(Air-Assisted)
OFF
AIRLESS
ti25486a

Operation

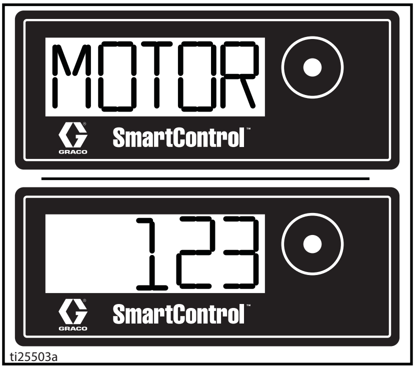
2. To enter Stored Data Mode, press and hold display button and set SELECTOR switch to **AIRLESS** position.


SmartControl
GRACO
AA
(Air-Assisted)
OFF
AIRLESS
ti25498a

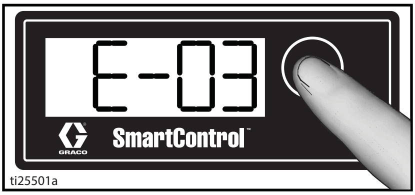
3. Sprayer model number is displayed.


S/N
12345
SmartControl
GRACO
ti25500a

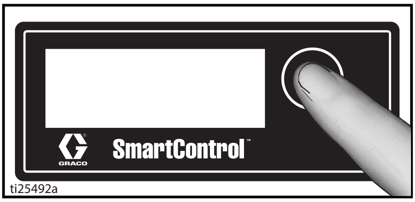
4. Press display button again to display motor run time in hours.


MOTOR
123
SmartControl
GRACO
ti25503a

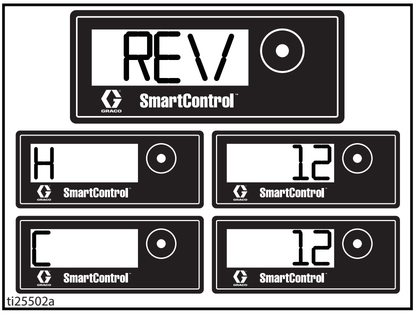
5. Press display button again to display Data Point 3. This will be the last error code.


E-03
SmartControl
GRACO
ti25501a

6. To erase last error code, press and hold display button.

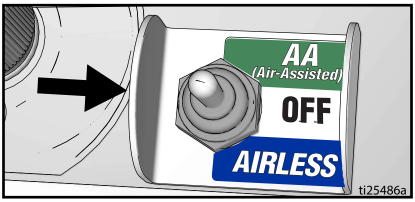

SmartControl
GRACO
ti25492a

7. Press display button again to display Data Point 4. The software revision is displayed.


REV
H
12
C
12
SmartControl
GRACO
ti25502a

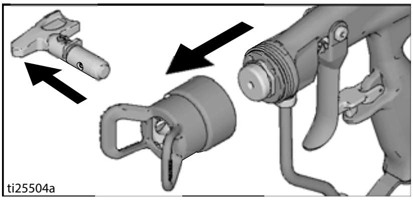
8. Press display button again to return to Data Point 1.

9. Set SELECTOR switch to **OFF** position to exit Stored Data.


AA
(Air-Assisted)
OFF
AIRLESS
ti25486a

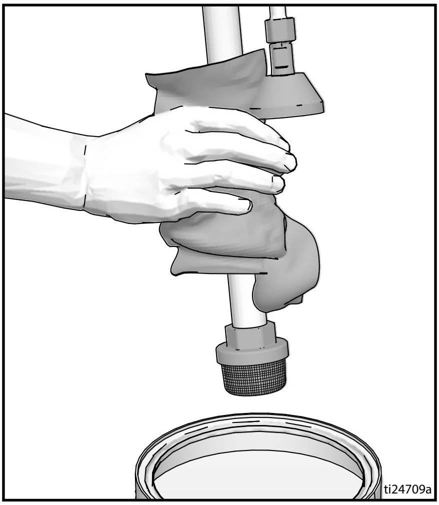
Cleanup

1. Perform **Pressure Relief Procedure**, page 10.
2. Remove tip guard and spray tip. For additional information, see separate gun manual.

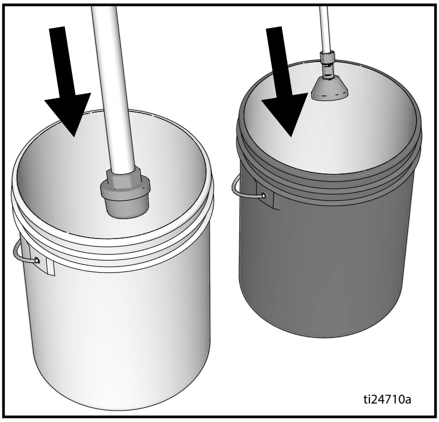


Fast Flush Drain Tube

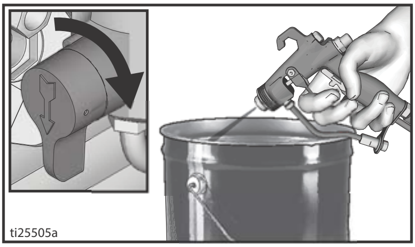
3. Remove fluid intake and drain tube from paint, wipe excess paint off outside.



4. Place fluid intake in flushing fluid. Use water for water base paint and mineral spirits for oil-based paint. Place drain tube in waste pail.



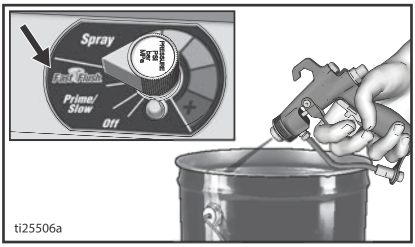
5. To flush drain tube and pump turn prime valve down.



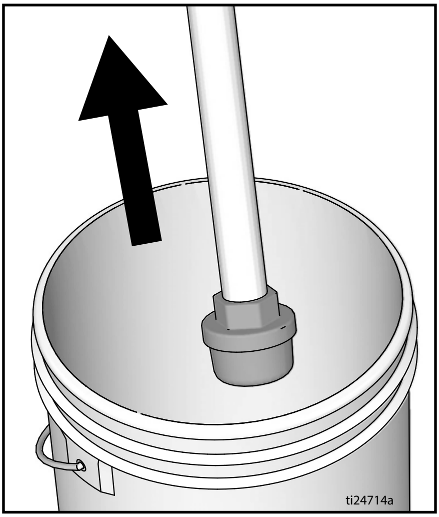
6. Turn pressure control to Fast Flush operate until the pump runs steady and flushing fluid appears in the waste pail.

Fast Flush Hose and Gun

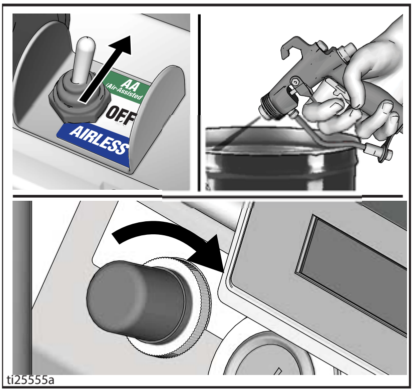
7. To flush airless hose and spray gun, turn prime valve horizontal.
8. Hold gun against waste pail. Disengage trigger lock. Turn pressure control to Fast Flush, trigger gun until the pump runs steady and flushing fluid appears.


Spray
PRESSURE
PSI
bar
MPa
Fast Flush
Prime/
Slow
Off
ti25506a

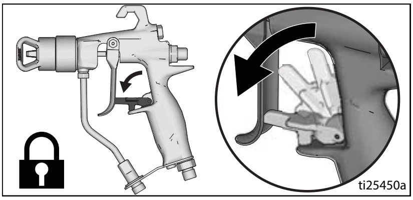
9. Stop triggering gun.
10. Raise fluid intake above flushing fluid.



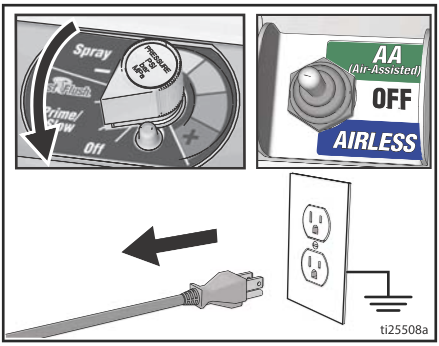
11. With prime valve horizontal. Trigger gun into flushing pail to purge fluid from hose.
12. Set SELECTOR switch to **AA** Air-Assisted position.


AA
(Air-Assisted)
OFF
AIRLESS
ti25555a

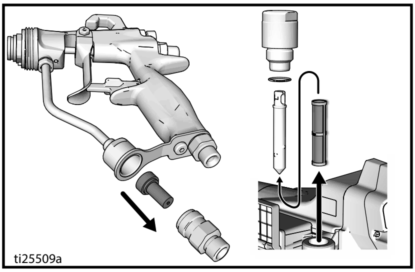
13. Trigger gun and slowly increase air pressure to blow material out of the gun air passages.
14. Engage trigger lock.



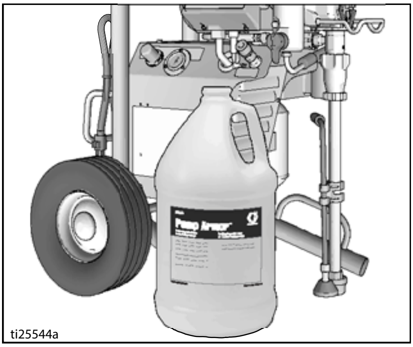
15. Turn pressure control knob to OFF and set SELECTOR switch to **OFF** position. Disconnect power to sprayer.


Spray
PRESSURE
PSI
bar
MPa
Fast Flush
Prime/
Slow
Off
AA
(Air-Assisted)
OFF
AIRLESS
ti25508a

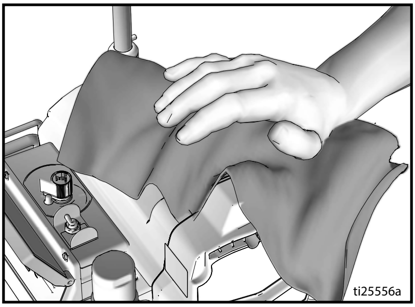
16. Remove filter from gun and sprayer if installed. Clean and inspect. Install filter. See separate gun manual.



17. If flushing with water, flush again with mineral spirits or Pump Armor to leave a protective coating to prevent freezing or corrosion.


Pump Armor
ti25544a

18. Wipe sprayer, hose and gun with a rag soaked in water or mineral spirits.



Maintenance

Routine maintenance is important to ensure proper operation of your sprayer. Maintenance includes performing routine actions which keep your sprayer in operation and prevents trouble in the future.

Activity	Interval
Inspect/clean sprayer filter, fluid inlet strainer, and gun filter.	Daily or each time you spray
Inspect motor shield vents for blockage.	Daily or each time you spray
Fill TSL by adding through TSL fill point.	Daily or each time you spray
Inspect motor brushes for wear. Brushes must be 1/2 in. (13mm) minimum length. NOTE: Brushes do not wear at the same rate on both sides of motor. Check both brushes.	Every 1000 gallons (3785 liters)
Check sprayer stall. With sprayer gun NOT triggered, sprayer motor should stall and not restart until gun is triggered again. If sprayer starts again with gun NOT triggered, inspect pump for internal/external leaks and check prime valve for leaks.	Every 1000 gallons (3785 liters)
Throat packing adjustment When pump packing begins to leak after extended use, tighten packing nut down until leakage stops or lessens. This allows approximately 100 gallons of additional operation before a repacking is required. Packing nut can be tightened without 0-ring removal.	As necessary based on usage

Troubleshooting

Mechanical/Fluid Flow

1. Follow **Pressure Relief Procedure**, page 10, before checking or repairing.
2. Check all possible problems and causes before disassembling the unit.

Problem	What to Check If check is OK, go to next check	What to Do When check is not OK, refer to this column
For units with display: E=0X is displayed. **For units with no display:** Control board status light is blinking or the light is off and there is power to the sprayer.	Fault condition exists.	Determine fault correction from **Electrical**, page 30.
Pump output is low	Spray tip worn.	Follow **Pressure Relief Procedure**, page 10, then replace tip. See separate gun or tip manual.
	Spray tip clogged.	Relieve pressure. Check and clean spray tip.
	Paint supply.	Refill and reprime pump.
	Intake strainer clogged.	Remove and clean, then reinstall.
	Intake valve ball and piston ball are not seating properly.	Remove intake valve and clean. Check balls and seats for nicks; replace if necessary. See pump manual. Strain paint before using to remove particles that could clog pump.
	Fluid filter or tip filter is clogged or dirty.	Clean filter.
	Prime valve leaking.	Follow **Pressure Relief Procedure**, page 10, then repair prime valve.
	Verify pump does not continue to stroke when gun trigger is released. (Prime valve not leaking.)	Service pump. See pump manual.
	Leaking around throat packing nut which may indicate worn or damaged packings.	Replace packings. See pump manual. Also check piston valve seat for hardened paint or nicks and replace if necessary. Tighten packing nut/wet-cup.

Troubleshooting

Problem	What to Check If check is OK, go to next check	What to Do When check is not OK, refer to this column
Pump output is low	Pump rod damage.	Repair pump. See pump manual.
	Low stall pressure.	Turn pressure knob fully clockwise. Make sure pressure control knob is properly installed to allow full clockwise position. If problem persists, replace pressure transducer.
	Piston packings are worn or damaged.	Replace packings. See pump manual.
	O-ring in pump is worn or damaged.	Replace o-ring. See pump manual.
	Intake valve ball is packed with material.	Clean intake valve. See pump manual.
	Large pressure drop in hose with heavy materials.	Reduce overall length of hose.
	Check extension cord for correct size.	See **Extension Cords**, page 9.
	Loose motor brushes and terminals.	Tighten terminal screws. Replace brushes if leads are damaged.
	Worn motor brushes. (Brushes must be 1/2 in. [13mm] minimum length.)	Replace brushes.
	Broken and misaligned motor brush springs. Rolled portion of spring must rest squarely on top of brush.	Replace spring if broken. Realign spring with brush.
	Motor brushes are binding in brush holders.	Clean brush holders, remove carbon dust with a small cleaning brush. Align brush lead with slot in brush holder to assure free vertical brush movement.
Motor runs but pump does not stroke	Connecting rod assembly damaged. See pump manual.	Replace connecting rod assembly. See pump manual.
	Gears or drive housing damaged.	Inspect drive housing assembly and gears for damage and replace if necessary.
Excessive paint leakage into throat packing nut	Throat packing nut is loose.	Remove throat packing nut spacer. Tighten throat packing nut just enough to stop leakage.
	Throat packings are worn or damaged.	Replace packings. See pump manual.
	Displacement rod is worn or damaged.	Replace rod. See pump manual.

Problem	What to Check If check is OK, go to next check	What to Do When check is not OK, refer to this column
Fluid is spitting from gun	Air in pump or hose.	Check and tighten all fluid connections. Cycle pump as slowly as possible during priming.
	Spray tip is partially clogged.	Clear tip. See **Clear Tip Clog**, page 20.
	Fluid supply is low or empty.	Refill fluid supply. Prime pump. See pump manual. Check fluid supply often to prevent running pump dry.
Pump is difficult to prime	Air in pump or hose.	Check and tighten all fluid connections. Cycle pump as slowly as possible during priming.
	Intake valve is leaking.	Clean intake valve. Be sure ball seat is not nicked or worn and that ball seats well. Reassemble valve.
	Pump packings are worn.	Replace pump packings. See pump manual.
	Paint is too thick.	Thin the paint according to supplier recommendations.
Sprayer operates for 5 to 10 minutes then stops	Pump packing nut too tight. When pump packing nut is too tight the packings on the pump rod restrict pump action and overloads the motor.	Loosen pump packing nut. Check for leaks around throat. If necessary, replace pump packings. See Pump manual.

Electrical

Symptom: Sprayer does not run, stops running, or will not shut off.

Perform **Pressure Relief Procedure**, page 10.

1. Plug sprayer into correct voltage, grounded outlet.
2. Set the SELECTOR switch **OFF** wait 30 seconds and then turn power back **ON** again (this ensures sprayer is in normal run mode).
3. Turn pressure control knob clockwise 1/2 turn.
4. View digital display or remove control box cover to view control board status light. To determine which code (or any other code besides voltage supply) refer to the control board status light. Set the SELECTOR switch **OFF**, remove the control cover then turn power back **ON**. Observe the status light. Blinking LED total count equals the error code (for example: two blinks equals CODE 02).Press display button to restart code messages.

Keep clear of electrical and moving parts during troubleshooting procedures. To avoid electrical shock hazards when covers are removed for troubleshooting, wait 7 seconds after disconnecting power cord for stored electricity to dissipate.

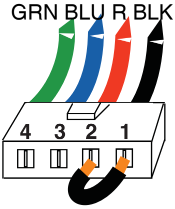
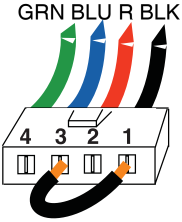
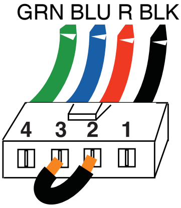
Error Code Messages

CODE	MESSAGE	ACTION
02	HIGH PRESSURE DETECTED - RELIEVE PRESSURE	Check for clogs. Use only Graco spray hoses, use a minimum of 50ft/15m.
03	PRESSURE TRANSDUCER NOT DETECTED	Check transducer connection.
05	MOTOR NOT SPINNING	Check for mechanical failure and check motor connections. Material may be too thick, thin material.
06	MOTOR OVERHEATED	Turn sprayer OFF. Check motor connections. Check shroud vents for blockage. Sprayer may take up to an hour to cool.

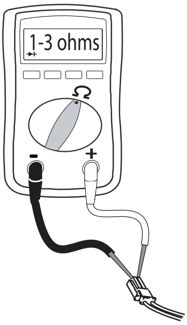
Problem	What to Check	How to check
Sprayer does not run at all AND Display is blank OR Control board status light never lights	See flow chart, page 36.	
Sprayer does not shut off AND Displays Code 02 message OR Control board status light blinks 2 times repeatedly	Control board.	Replace control board.
Sprayer does not run at all AND Displays Code 02 message OR Control board status light blinks 2 times repeatedly	Check transducer or transducer connections	Make sure there is no pressure in the system (see **Pressure Relief Procedure**, page 10). Check fluid path for clogs, such as clogged filter. Use airless paint spray hose with no metal braid. A small hose or metal braid hose may result in high-pressure spikes. Set SELECTOR switch **OFF** and disconnect power to sprayer. Check transducer and connections to control board. Disconnect transducer from control board socket. Check that transducer and control board contacts are clean and secure. Reconnect transducer to control board socket. Connect power, set SELECTOR switch **ON** and control knob 1/2 turn clockwise. If sprayer does not run properly, set SELECTOR switch **OFF** and go to next step. Install new transducer. Connect power, set SELECTOR switch **ON** and control knob 1/2 turn clockwise. Replace control board if sprayer does not run properly.

Troubleshooting

Problem	What to Check	How to check
Sprayer does not run at all AND Displays Code 03 message OR Control board status light blinks 3 times repeatedly	Check transducer or transducer connections (control board is not detecting a pressure signal).	Set SELECTOR switch **OFF** and disconnect power to sprayer. Check transducer and connections to control board. Disconnect transducer from control board socket. Check to see if transducer and control board contacts are clean and secure. Reconnect transducer to control board socket. Connect power, set SELECTOR switch **ON** and control knob to 1/2 turn clockwise. If sprayer does not run, set SELECTOR switch **OFF** and go to next step. Connect a confirmed working transducer to control board socket. Set SELECTOR switch **ON** and control knob to 1/2 turn clockwise. If sprayer runs, install new transducer. Replace control board if sprayer does not run. Check transducer resistance with an ohmmeter (less than 9k ohm between red and black wires and 3-6k ohm between green and yellow wires).
Sprayer does not run at all AND Displays Code 05 message OR Control board status light blinks 5 times repeatedly	Control is commanding motor to run but motor shaft does not rotate. Possibly locked rotor condition, an open connection exists between motor and control, there is a problem with motor or control board, or motor amp draw is excessive.	1.Remove pump and try to run sprayer. If motor runs, check for locked or frozen pump or drive train. If sprayer does not run, continue to step 2. 2.Set SELECTOR switch **OFF** and disconnect power to sprayer. 3.Disconnect motor connector(s) from control board socket(s). Check that motor connector and control board contacts are clean and secure. If contacts are clean and secure, continue to step 4. 4.Set sprayer to OFF and spin motor fan 1/2 turn. Restart sprayer. If sprayer runs replace control board. If sprayer does not run, continue to step 5.

Problem	What to Check	How to check
		5.Perform Spin Test: Test at large 4-pin motor field connector. Disconnect fluid pump from sprayer. Test motor by placing a jumper across pins 1 & 2. Rotate motor fan at about 2 revolutions per second. A cogging resistance to motion should be felt at the fan. The motor should be replaced if no resistance is felt. Repeat for pin combinations 1 & 3 and 2 & 3. Pin 4 (the green wire) is not used in this test. If all spin test is positive, continue to step 6. **STEP 1:**  **STEP 2:**  **STEP 3:** 

Troubleshooting

Problem	What to Check	How to check
		6.Perform Field Short Test: Test at large 4-pin motor field connector. There should not be continuity from pin 4, the ground wire, and any of the remaining 3 pins. If motor field connector tests fail, replace motor. 7.Check Motor Thermal Switch: Unplug thermal wires. Set meter to ohms. Meter should read 100k ohms.  8.Reconnect motor connector(s) to control board socket(s). Connect power, set SELECTOR switch **ON** and control knob to 1/2 turn clockwise. If motor does not run, replace control board.

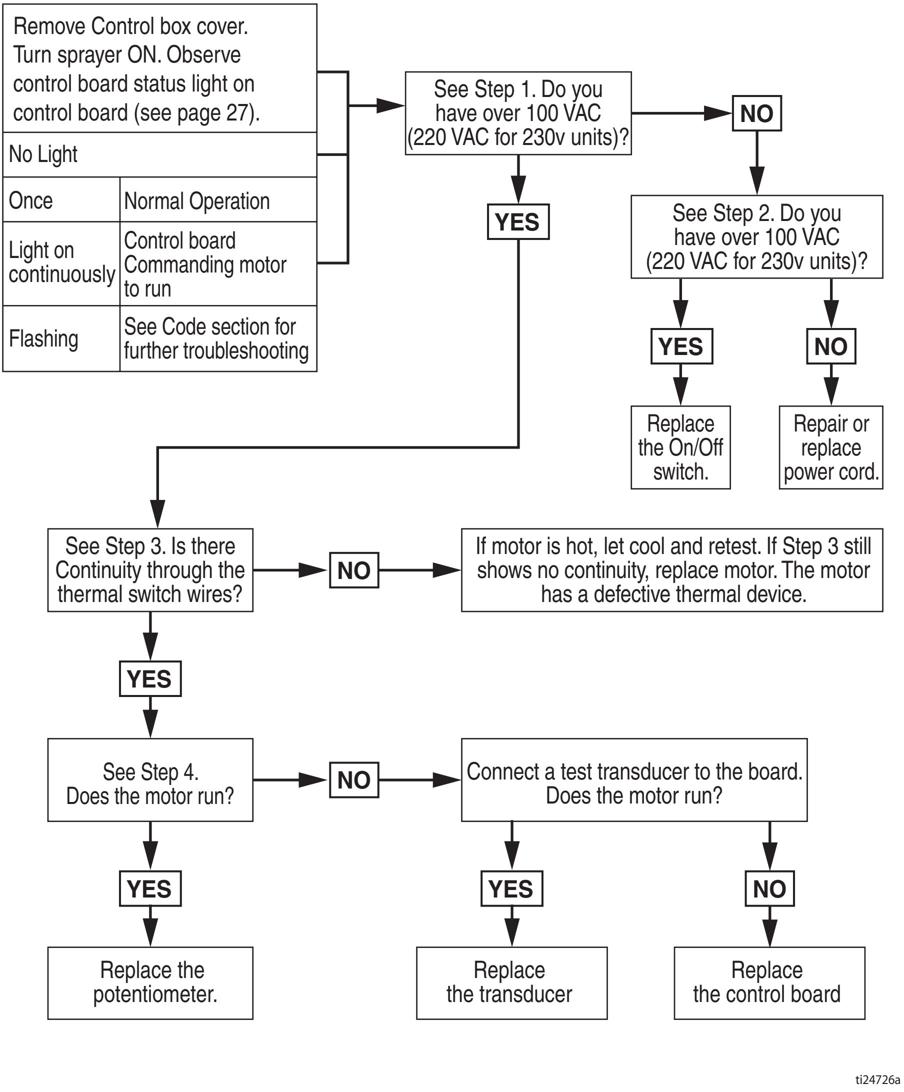
Problem	What to Check	How to check
Sprayer does not run at all AND Displays Code 06 message OR Control board status light blinks 6 times repeatedly	Motor is hot or there is a fault in the motor thermal device.	Allow sprayer to cool. If sprayer runs when cool, correct cause of overheating. Keep sprayer in cooler location with good ventilation. Make sure motor air intake is not blocked. If sprayer still does not run, replace motor. **NOTE:** Motor must be cooled down for the test. 1. Check thermal device connector (yellow wires) at control board. 2. Disconnect thermal device connector from control board socket. Make sure contacts are clean and secure. Measure resistance of the thermal device. If reading is not correct, replace motor. **Check Motor Thermal Switch:** Unplug thermal wires. Set meter to ohms. Meter should read 100k ohms. 3. Reconnect thermal device connector to control board socket. Connect power, turn sprayer ON and control knob 1/2 turn clockwise. If sprayer does not run, replace control board.
Basic electrical problems	Motor leads are securely fastened and properly mated	Replace loose terminals; crimp to leads. Be sure terminal are firmly connected. Clean circuit board terminals. Securely reconnect leads.
	For loose motor brush lead connections and terminals.	Tighten terminal screws. Replace brushes if leads are damaged.
	Brushes must be 1/2 in. [13mm] minimum length. NOTE: Brushes do not wear at the same rate on both sides of motor. Check both brushes.	Replace brushes.
	Broken or misaligned motor brush springs. Rolled portion of spring must rest squarely on top of brush.	Replace spring if broken. Realign spring with brush.
	Motor brushes may be binding in brush holders.	Clean brush holders. Remove carbon with small cleaning brush. Align brush leads with slot in brush holder to assure free vertical brush movement.
	Motor armature commutator for burn spots, gouges or extreme roughness.	Remove motor and have motor shop resurface commutator if possible.

Sprayer Will Not Run

(See following page for steps)

Sprayer Will Not Run

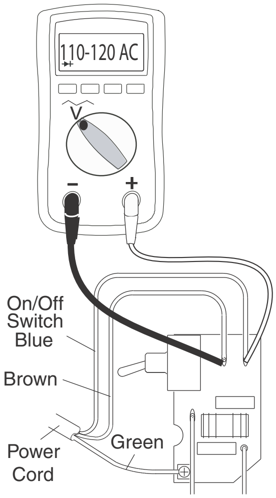
(see following pages for steps)


See Step 1. Do you have over 100 VAC (220 VAC for 230v units)?
YES
NO
See Step 2. Do you have over 100 VAC (220 VAC for 230v units)?
YES
NO
Replace the On/Off switch.
Repair or replace power cord.
See Step 3. Is there Continuity through the thermal switch wires?
NO
If motor is hot, let cool and retest. If Step 3 still shows no continuity, replace motor. The motor has a defective thermal device.
YES
See Step 4. Does the motor run?
NO
Connect a test transducer to the board. Does the motor run?
YES
Replace the potentiometer.
YES
Replace the transducer
NO
Replace the control board
ti24726a

Remove Control box cover. Turn sprayer ON. Observe control board status light on control board (see page 27).	
No Light	
Once	Normal Operation
Light on continuously	Control board Commanding motor to run
Flashing	See Code section for further troubleshooting

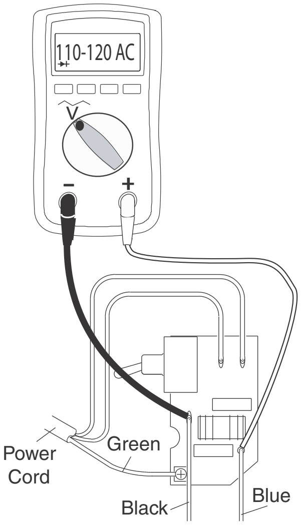
Step 1:

Plug Power cord in and turn switch ON. Connect probes to ontrol board. Turn meter to AC Volts.


110-120 AC
V
–
+
On/Off Switch Blue
Brown
Power Cord
Green

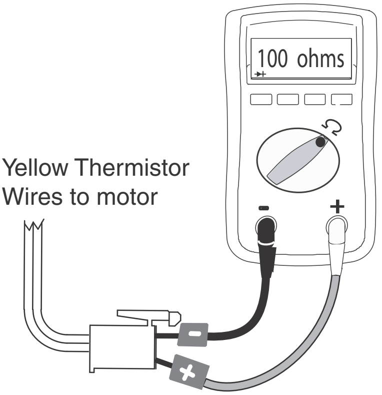
Step 2:

Plug Power cord in and turn switch ON. Connect probes to control board. Turn meter to AC Volts


110-120 AC
V
–
+
Power Cord
Green
Black
Blue

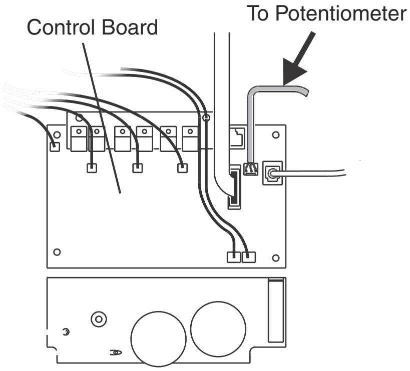
Step 3:

Check motor thermal switch. Unplug yellow wires. Meter should read 100 ohms. NOTE: Motor should be cool during reading.


100 ohms
Yellow Thermistor Wires to motor
-
+

Step 4:

Disconnect potentiometer. Plug power cord in and turn switch ON.


Control Board
To Potentiometer

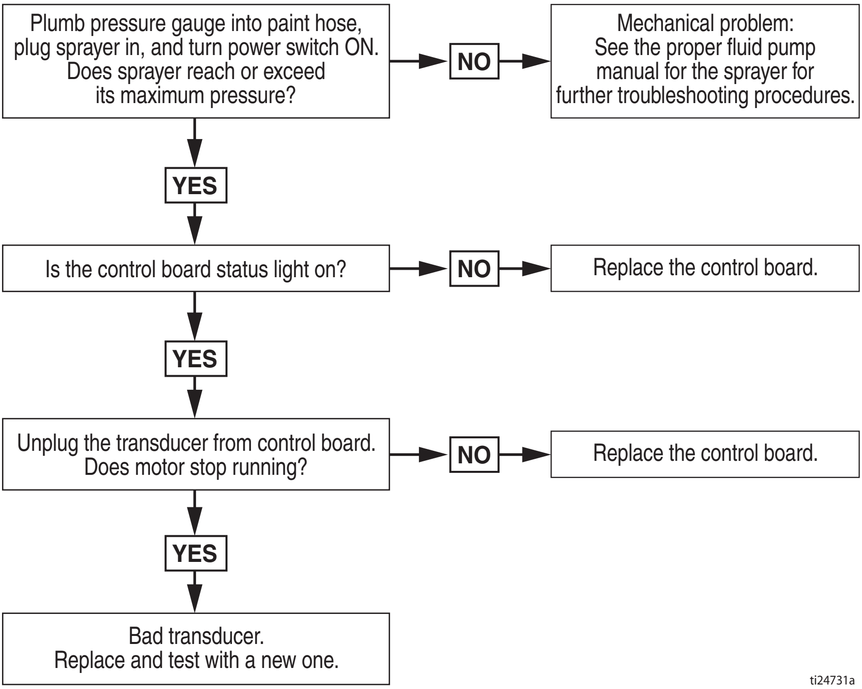
ti24084a

Sprayer Will Not Shut Off

1. Perform **Pressure Relief Procedure**, page 10. Leave prime valve open (down) and set SELECTOR switch **OFF**.
2. Remove control box cover so the control board status light can be viewed if available.

Troubleshooting Procedure

Troubleshooting Procedure



Plumb pressure gauge into paint hose, plug sprayer in, and turn power switch ON. Does sprayer reach or exceed its maximum pressure?

Mechanical problem: See the proper fluid pump manual for the sprayer for further troubleshooting procedures.

Is the control board status light on?

Replace the control board.

Unplug the transducer from control board. Does motor stop running?

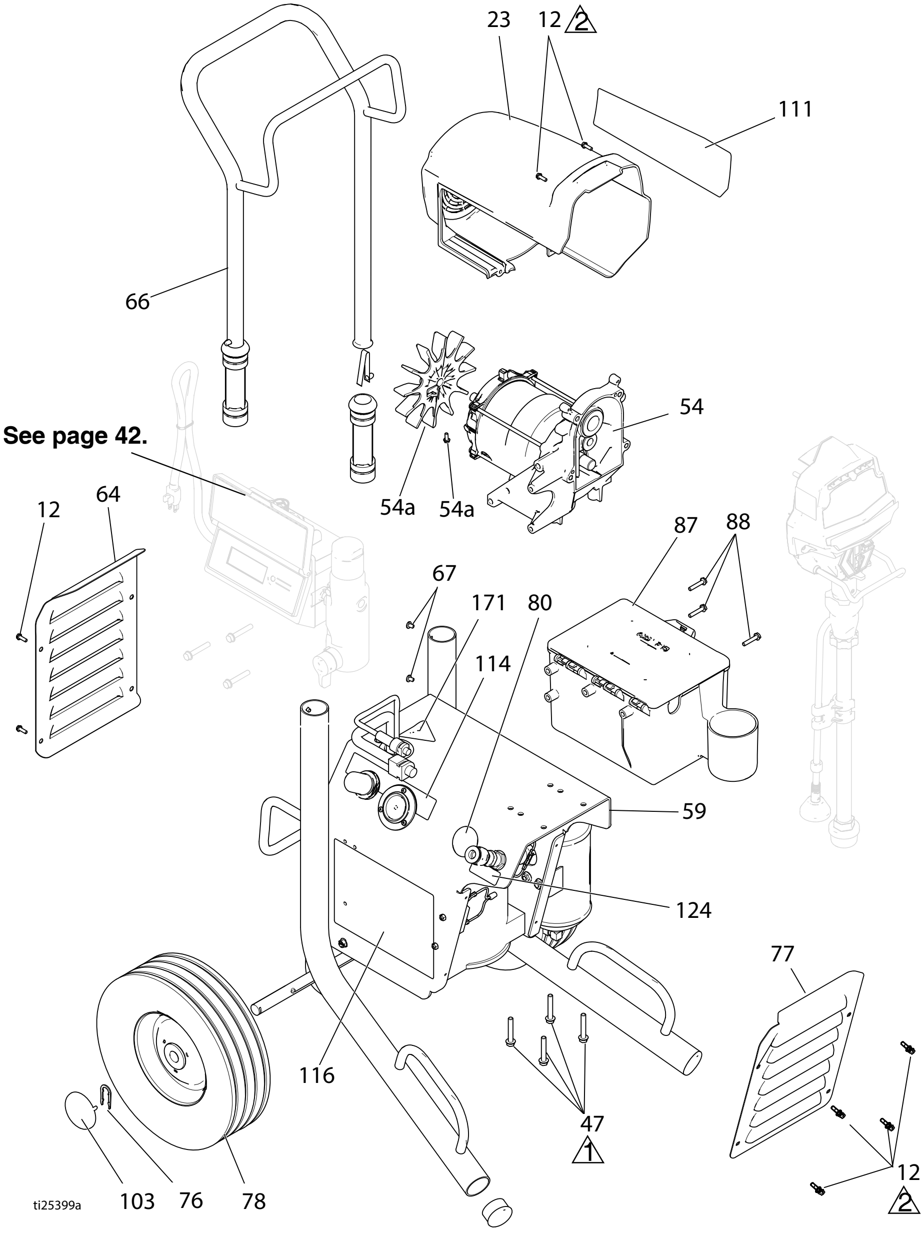
Replace the control board.

Bad transducer. Replace and test with a new one.

Sprayer

See page 44 for Compressor parts.

Ref.	Torque
1	140-160 in-lb (15.8 - 18.1 N•m)
2	30-35 in-lb (3.4 - 4.0 N•m)


23
12 2
111
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See page 42.
54a
54a
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64
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67
171
80
114
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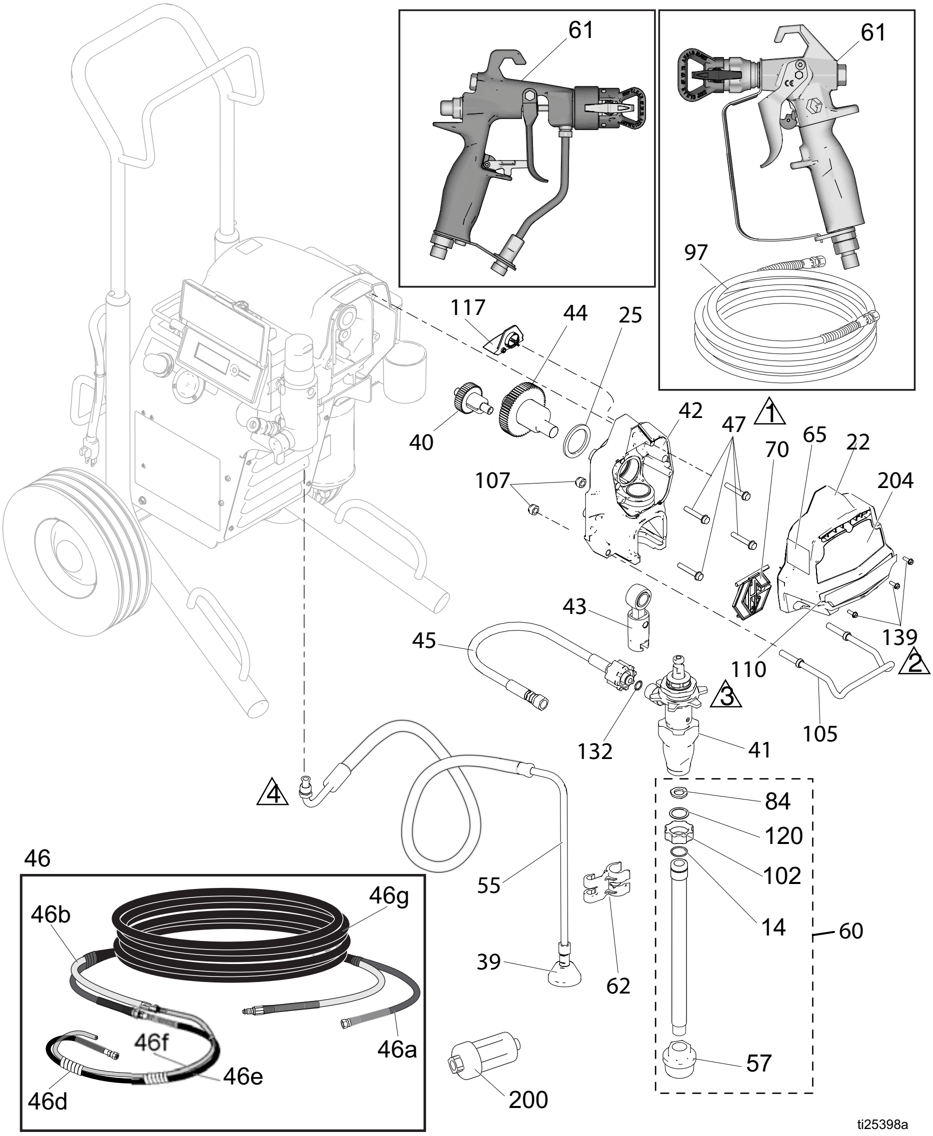
77
116
47
1
12
2
103
76
78
ti25399a

Sprayer

Ref.	Torque
△1	140-160 in-lb (15.8 - 18.1 N•m)
△2	30-35 in-lb (3.4 - 4.0 N•m)
△3	Hammer tight
△4	25-30 ft-lb (33.9 - 40.7 N•m)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△3
105
132
41
△4
84
120
102
14
60
55
39
62
57
200
46
46g
46b
46f
46a
46e
46d
ti25398a

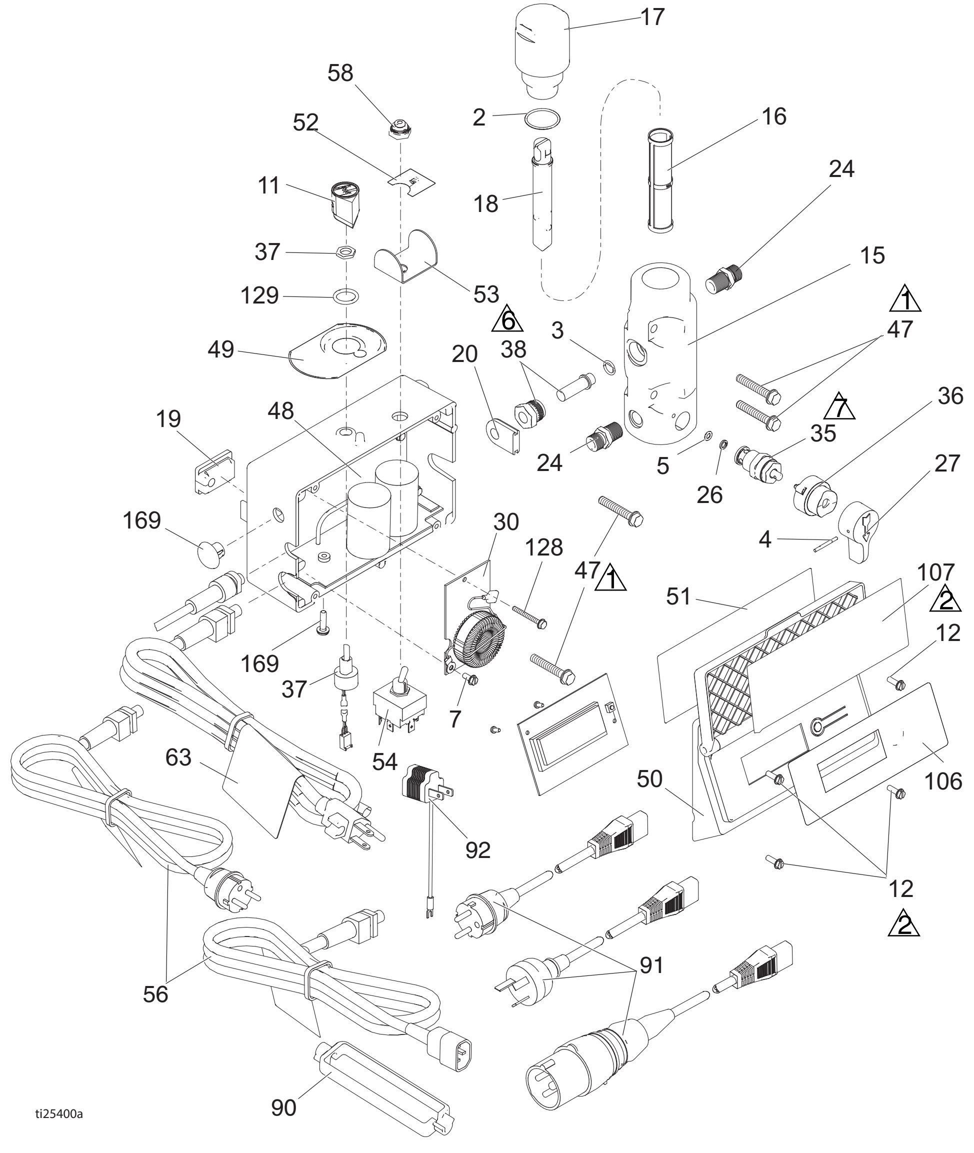
Sprayers Parts List

Ref.	Part	Description	Qty.
12	117501	SCREW, mach, slot hex wash hd	12
14	103413	PACKING, o-ring	1
22	17C541	COVER, front, painted	1
23	15G449	SHIELD, motor, painted	1
25	180131	BEARING, thrust	1
39	241920	DEFLECTOR, threaded	1
40	249194	GEAR, reducer	1
41		PUMP, displacement, PC	1
	17C487	North America	
	17C488	Asia/ANZ/Japan	
	17C489	Europe	
42	24W817	HOUSING, drive, PC *includes 12, 70*	1
43	24W640	ROD, connecting, PC	1
44	24X020	KIT, repair, crankshaft, *includes 25*	1
45	24W830	KIT, hose, cpld, PC, *includes 132*	1
46	24U579	3300 psi hose set, 50 ft. (15.2m) Models 17C417, 17C321 *includes 46a, 46b, 46d, 46e, 46f, 46g*	1
46a	278764	HOSE, cpld, 1/4 x 50 ft.	1
46b	16X433	HOSE, air, 50 ft.	1
46d	15X843	SLEEVE, wrap, spiral	3
46e	278750	HOSE, Nylon, fluid, 6 ft. (1.8m)	1
46f	278751	HOSE, whip, air	1
46g	16X453	COVER, flex, 60 ft.	1
47	117493	SCREW, mach, hex washer HD	8
54	287807	MOTOR, 395 *includes 54a, 54b*	1
54a	15D088	FAN, motor	1
54b	115477	SCREW, mach, torx, painted	1
55	244240	HOSE, drain, Ultra hi-boy, *includes 39*	1
57	246385	STRAINER, 7/8-14 unf	1
59	24U249	FRAME, cart, hi, AA	1
60	17C992	TUBE, suction *includes 14, 57, 84, 102, 120*	1
61		GUN, assy, AA G40	
	262929	Models 17C424, 17C357	1
	262932	Models 17C423, 17C358	1
	288420	Model 17C424	1
62	276888	CLIP, drain line	1
63▲		LABEL, warning, fire/explosion, skin	
	15H085	Model 17C357, 17C424	1
	16G596	Models 17C358, 17C423	1
64	15K053	PLATE, rear, painted	1
65▲		LABEL, warning	
	16G596	Models 17C423, 17C358	
	195793	Models 17C424, 17C357	1
66	287489	HANDLE, assy, hi cart	1
67	109032	SCREW, mach, pnh	4
70	17C483	COVER, pump rod	1
76	15B999	CLIP, retaining	2
77	15K052	PLATE, front, painted	1
78	106062	WHEEL, semi pneumatic	2
84	115099	WASHER, garden hose	1
87	287253	TOOL BOX, *includes 88*	1
88	118852	SCREW, thd forming, hex washer hd	3
94	15K040	NUT, regulator, metal	1
97	243341	HOSE, cpld, 1/4 x 50 ft.	1
101		TIP, spray, latex RAC X	1
	LTX517	Models 17C357, 17C424	
	PAA517	All other models	
102	15E813	NUT, jam	1
103	104811	CAP, hub	2
105	17C990	HOOK, pail	1
107	111040	NUT, lock, insert, nylock, 5/16	2
110	17C837	LABEL, brand, front, FinishPro 595	1
111	17C855	LABEL, brand, side, FinishPro 595	1
114	15K468	LABEL, AA, regulator/gauge	1
116	15K465	LABEL (Models 17C424, 17C357)	1
117	15G447	PLUG, tubing	1
120	15B652	WASHER, suction	1
124▲	290228	LABEL, caution	1
132	16H137	PACKING, o-ring	1
137	288514	KIT, conversion, RAC tip to flat tip (not shown)	1
139	127914	SCREW, mach, slot hex	1
148	111909	GROMMET	1
171▲	16D646	LABEL, warning	1
200	24U981	KIT, in-line desiccant (5 pack)	
	24U982	KIT, in-line desiccant (25 pack)	
204	17C852	LABEL, brand, front, FinishPro 595	1
	238049	FLUID, TSL, 4 oz	1

▲*Replacement Danger and Warning labels, tags, and cards are available at no cost.*

Control Box

Ref.	Torque
△1	140-160 in-lb (15.8 - 18.1 N•m)
△2	30-35 in-lb (3.4 - 4.0 N•m)
△6	37-43 ft-lb (50.2 - 58.3 N•m)
△7	130-150 in-lb (14.7 - 16.9 N•m)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107
△2
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12
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7
54
63
50
106
92
12
△2
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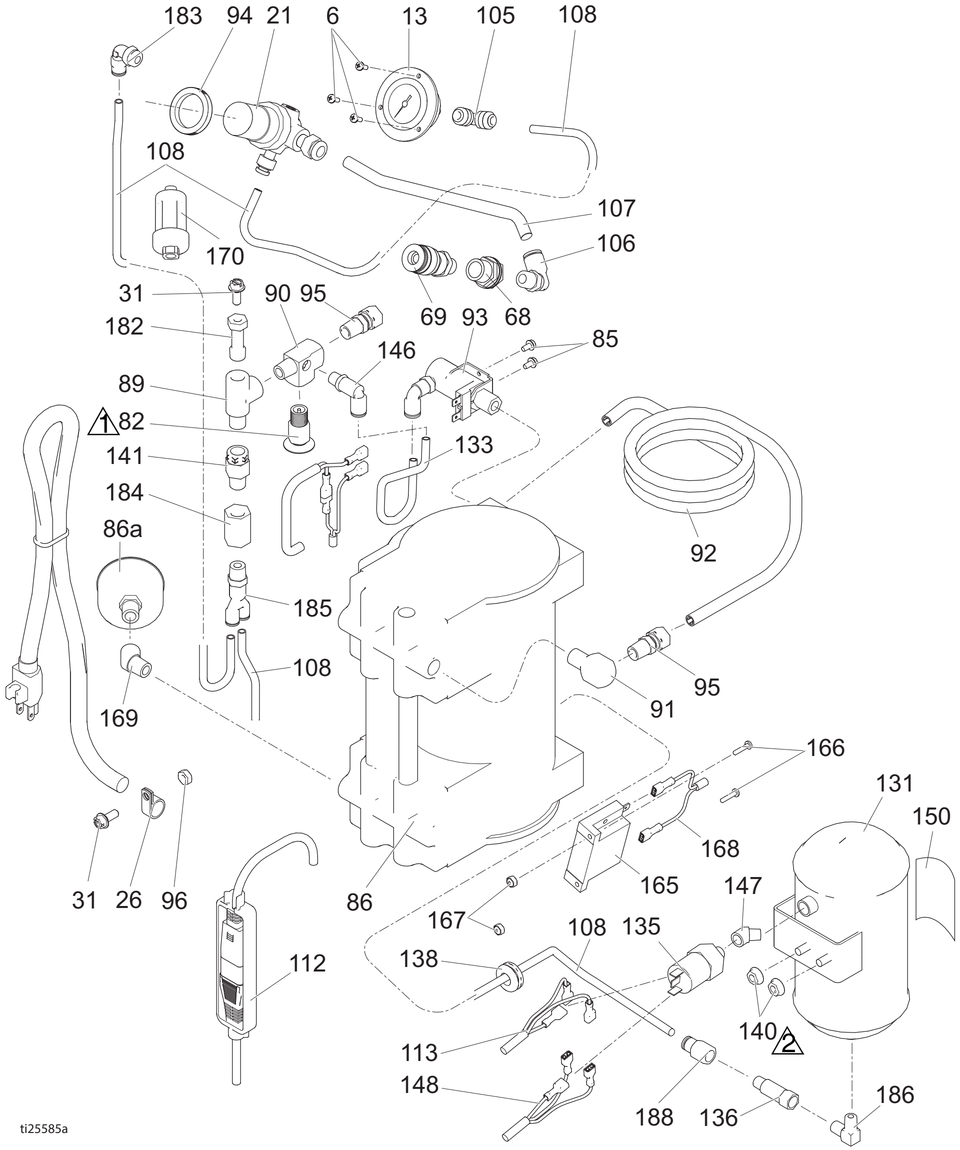
56
90
ti25400a

Control Box Parts List

Ref.	Part	Description	Qty.
2	117828	PACKING, o-ring	1
3	111457	PACKING, o-ring	1
4	111600	PIN, grooved	1
5	277364	GASKET, seat, valve	1
7	123850	SCREW, slot, hex, wash hd	1
11	116167	KNOB, potentiometer	1
12	117501	SCREW, mach, hex washer hd	4
15	15G455	MANIFOLD, fluid	1
16		FILTER, fluid	1
	246425	30 mesh	
	246384	60 mesh, original	
	246382	100 mesh	
	246383	200 mesh	
17	287902	KIT, repair, filter cap *includes 18*	1
18	15B071	INSERT, filter	1
19	15G562	BUSHING, control box	1
20	15B120	GROMMET, transducer	1
24	162453	NIPPLE, (1/4 npsm x 1/4 npt)	2
26	15E022	SEAT, valve	1
27	187625	HANDLE, valve, drain	1
30	24U634	BOARD, filter	1
35	239914	VALVE, drain *includes 5, 26*	1
36	224807	BASE, valve	1
37	256219	POTENTIOMETER, adj, pressure with nut	1
38	243222	TRANSDUCER, pressure control, *includes 3*	1
47	117493	SCREW, mach, hex washer hd	4
48	17D890	BOX, control board *includes 7, 11, 19, 30, 37, 49, 52, 53, 54, 58, 127, 128, 129*	1
49	17D154	LABEL, control, w/FastFlush	1
50	24W809	DIGITAL, display *includes 51, 106, 107*	1
51	17C875	LABEL, control	1
52	16X748	LABEL, ON/OFF	1
53	16X642	BRACKET, switch	1
54	120544	SWITCH, toggle	1
56		CORD, power	1
	15H064	US, 120V	
	16X842	AP and Europe Multicord	
	16X841	CEE 7/7	
58	195428	BOOT, toggle	1
90	195551	RETAINER, plug, adapter	
		Multicord models	2
		CEE 7/7 models	1
91		CORD SET, adapter	1
	253368	UK	
	242005	Australia	
	287121	Italy, Denmark, Sweden	
92	244285	ADPTER, Japan	1
106	15G861	LABEL, smart control display	1
107	15G588	LABEL, digital tracking system	1
127	120165	SCREW, mach, Phillips, pan hd	1
128	120406	SCREW, mach, hex washer hd	1
129	158674	O-RING, packing	1
169	16Y457	PLUG, molded	1
KIT, ProGuard+, 230V models only (not shown)			1
	24W090	CEE 7/7	
	24W755	Multicord, IEC-320	

Compressor

Ref.	Torque
△1	60-85 in-lb (6.8 - 9.6 N•m)
△2	95-100 in-lb (10.7 - 11.3N•m)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86a
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165
147
167
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135
112
138
140 △2
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148
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188
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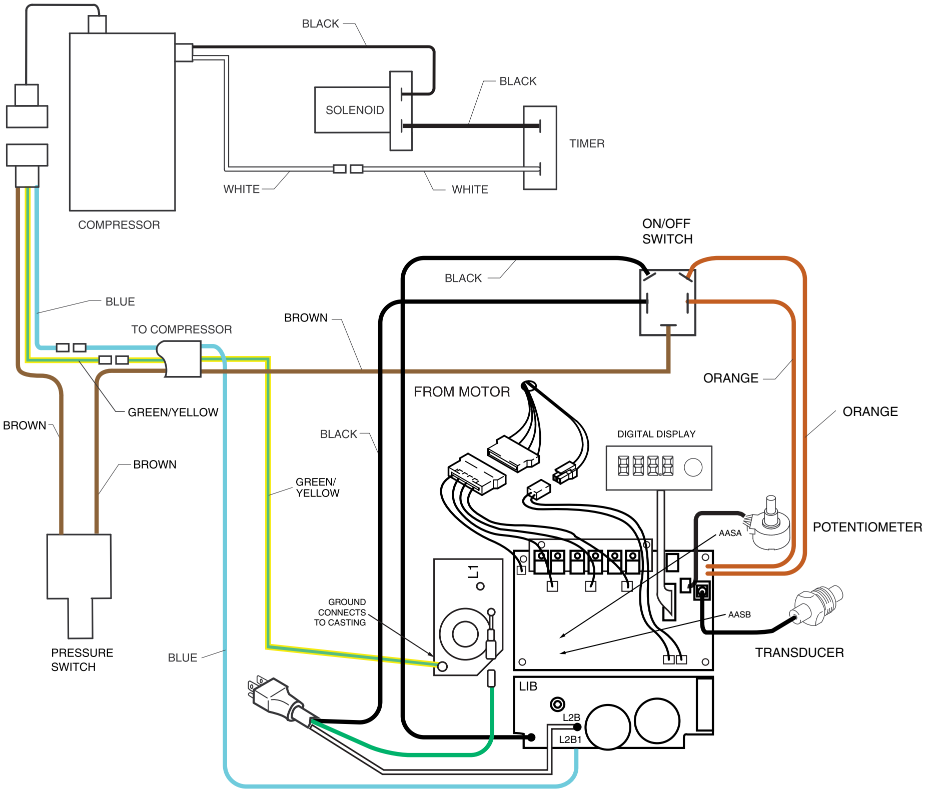
ti25585a

Compressor Parts List

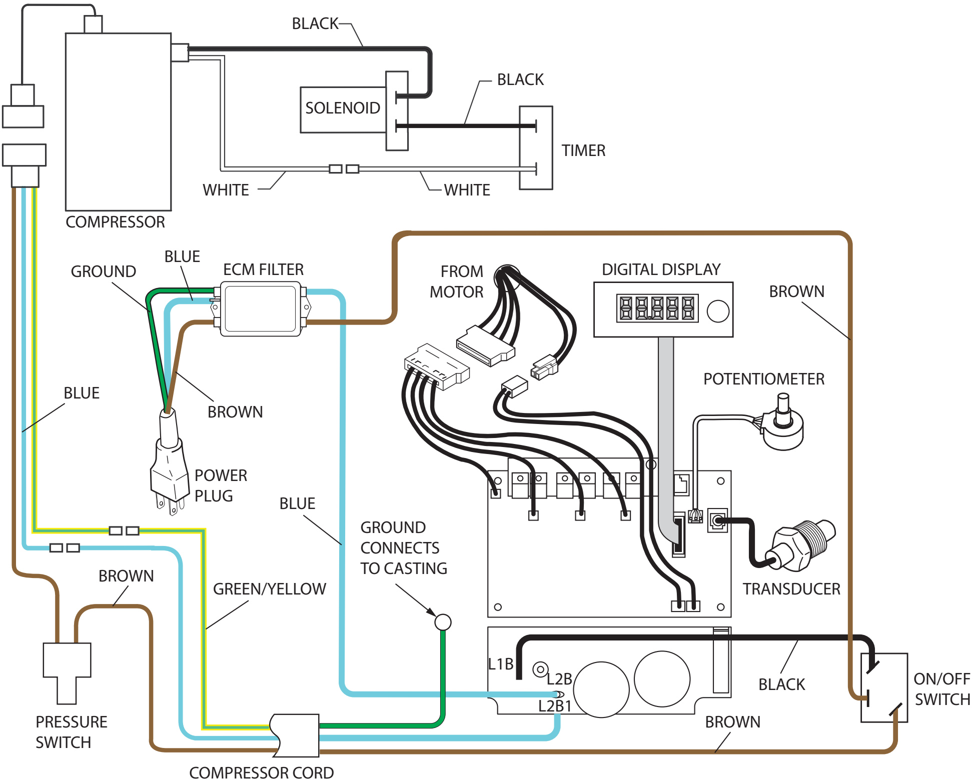
Ref.	Part	Description	Qty.
6	115494	SCREW, mach, Phillips	3
13	120643	GAUGE, pressure, panel mount, 1.5	1
21	127330	REGULATOR, air, 1/4 in. npt	1
26		CLAMP, wire	1
	113491	Model 17C417	
	120143	All other models	
31	117633	SCREW, slot hex wash hd	6
68	104641	FITTING, bulkhead	1
69	120963	COUPLE, quick, disconnect	1
82	122703	VALVE, pressure, relief	1
85	109575	SCREW, threadforming, hexhead	2
86		AIR COMPRESSOR (includes 86a)	
	288720	Models 17C424	1
	288722	Model 17C357, 17C423, 17C358	1
86a	288724	KIT, compressor, filter	1
89	106228	FITTING, brass, elbow	1
90	16Y589	FITTING, tee	
91	187357	ELBOW, street	1
92	16X397	TUBE, heat exchange, 395/595	1
93		SOLENOID, 2 way, norm open	1
	16X399	Model 17C424	1
	16X526	Model 17C357, 17C423, 17C358	1
94	15K040	NUT, regulator, metal	1
95	120732	FITTING, compression, male connect	2
96	100015	NUT, hex mscr	1
105	120653	FITTING, push to conn	1
106	120753	FITTING, push to connect elbow	1
107	15K391	TUBE, air	1
108	15B822	TUBE, air	2
112	195551	RETAINER, plug, adapter	1
113	16X530	CORD, pwr, comp. female end	1
131	16X915	TANK, painted	1
133	16X477	HOSE, air	1
135	127343	SWITCH, pressure	1
136	127339	VALVE, check, 1/8 in. mnpt x fnpt	1
138	801012	GROMMET	1
140	115942	NUT, hex, flange head	2
141	127340	VALVE, check, 1/4 in. mnpt x fnpt	1
146	597151	FITTING, elbow	3
147	113630	ELBOW, street 45 degree 1/8 npt	1
148	16X827	CORD, compress/control board	1
150	16X906	LABEL, brand, smartcomp	1
165	16Y436	TIMER, solid state	
166	125483	SCREW, mach, pnh, sems, phillips	2
167	C19862	NUT, lock, hex	2
168	16Y442	CORD, compressor to timer	1
169	113444	FITTING, elbow, street	1
170	127465	FILTER, in-line, desiccant	1
182	17B227	FITTING, stand-off	1
183	114109	FITTING, elbow, male	1
184	113093	CONNECTOR, pipe	1
185	127716	CONNECTOR, Y, male	1
186	110207	ELBOW, pipe	1
188	114320	FITTING, connector, female	1

Wiring Diagrams

120V, US/Japan


BLACK
BLACK
SOLENOID
TIMER
WHITE
WHITE
COMPRESSOR
ON/OFF SWITCH
BLACK
BLUE
BROWN
TO COMPRESSOR
ORANGE
ORANGE
FROM MOTOR
GREEN/YELLOW
BROWN
BLACK
DIGITAL DISPLAY
BROWN
GREEN/ YELLOW
POTENTIOMETER
AASA
L1
GROUND CONNECTS TO CASTING
AASB
TRANSDUCER
PRESSURE SWITCH
BLUE
LIB
L2B
L2B1

110V, UK / 230V


BLACK
SOLENOID
BLACK
TIMER
WHITE
WHITE
COMPRESSOR
GROUND
BLUE
ECM FILTER
FROM MOTOR
DIGITAL DISPLAY
BROWN
POTENTIOMETER
BLUE
BROWN
POWER PLUG
BLUE
GROUND CONNECTS TO CASTING
TRANSDUCER
BROWN
GREEN/YELLOW
L1B
L2B
L2B1
BLACK
ON/OFF SWITCH
BROWN
PRESSURE SWITCH
COMPRESSOR CORD

Technical Specifications

FinishPro II 595 PC Pro		
	US	Metric
Sprayer		
Power requirements	★100/120V AC, 50/60 Hz, 15A, 1Ø	◆ 230V AC, 50/60 Hz, 10A, 1Ø
Generator Minimum	4000 W	
Max tip size		
Europe◆ / Asia/Australia◆	0.027	0.027
Max material output gpm (lpm)		
US ★ / UK★	.68 gpm	2.5 lpm
Europe◆ / Asia/Australia◆	.68 gpm	2.5 lpm
Maximum material pressure - Airless		
US ★	3300 psi	227 bar
UK★	2800 psi	193 bar
Europe◆ / Asia/Australia◆	3300 psi	227 bar
Maximum material pressure - AA		
US ★ / UK★	2800 psi	193 bar
Europe◆ / Asia/Australia◆	3300 psi	227 bar
Atomizing air output		
US★ / UK★	3.2 cfm	3.2 cfm
Europe / Asia/Australia	2.9 cfm	2.9 cfm
Air pressure	35 psi	2.4 bar
Dimensions		
Length	32.5 in.	82.5 cm
Width	21 in.	53.3 cm
Height	40.5 in.	102.8 cm
Weight (bare)	112 lb	50.8 kg
Noise** (dBa) @ 70 psi (0.48 MPa, 4.8 bar)		
Sound pressure	79 dBA	
Sound power	93 dBA	
Materials of Construction		
Pump motor	1.4 HP Brushless	1.4 HP Brushless
Compressor motor	1.0 HP AC Induction	1.0 HP AC Induction
Material hose	1/4 in. x 50-ft (blue)	1/4 in. x 15.2 m (blue)
Air hose	3/8 in. x 50-ft (clear)	3/8 in. x 15.2 m (clear)
Gun	G40 w RAC X tip	G40 w RAC X tip
Wetted materials on all models	zinc- and nickel-plated carbon steel, nylon, stainless steel, PTFE, Acetal, leather, UHMWPE, aluminum, tungsten carbide, polyethylene, fluoroelastomer, urethane	

FinishPro II 595 PC Pro		
	US	Metric
Notes		
** Startup pressures and displacement per cycle may vary based on suction condition, discharge head, air pressure, and fluid type.* *** Sound pressure measured 3 feet (1 meter) from equipment.* *Sound power measured per ISO-3741.*		

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call 1-800-690-2894 to identify the nearest distributor.

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Original instructions. This manual contains English. MM 334598

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